

Central Florida Nurse Employer Pilot Survey: Results for Public Health Departments

Introduction and Methods

The Florida Center for Nursing (FCN), a state entity charged with tracking and addressing the nursing shortage in Florida, conducted a nurse employer survey in the Central Florida area in April and May of 2007. This Central Florida study is the pilot project for a larger, statewide demand survey set to begin in July 2007. The study's purpose is to understand current and future employer needs so that solutions to the shortage can be better tailored to Florida's nurse employers. The pilot survey was fielded to all licensed home health agencies, long term care facilities, ambulatory surgical facilities, and public health departments in Orange, Lake, Osceola, Seminole, and Sumter counties. A survey fielded to area hospitals was completed earlier in the year by Partners for a Healthy Community, with support from FCN. A report of results will be available at the Partners website at www.workforcecentralflorida.com/phc. This report details results obtained within the five public health departments in this five-county area.

Support for the public health portion of this survey was solicited from officials in the state's Department of Health. The Deputy State Health Officer, Dr. Bonita Sorensen, endorsed our effort and mentioned the survey during a conference call with county-level public health administrators. Ms. Laura Brazell, Registered Nurse Consultant in the state's Office of Public Health Nursing, assembled contact information for each of the five health departments, including identification of the specific individual in the department who would complete the survey. The survey utilized a self-administered questionnaire delivered by U.S. mail. A total of four contacts were made by mail with respondents. The first contact contained a cover letter, the questionnaire (shown as an appendix to this report), and a self-addressed stamped envelope for returns. The second contact was a reminder letter sent to those who had not responded during the first two weeks of the study. The third mailing contained a replacement questionnaire, and the fourth mailing cautioned non-respondents that the final deadline for receipt of the survey was growing near. Mailings were sent approximately two weeks apart.

After four mailings and nearly ten weeks, responses were obtained from all five of the health departments – a response rate of 100 percent for this industry. This means that results should represent public health in this five-county area very well, within the limits of measurement error in the questionnaire. However, the very small sample size for this pilot project also limits the types of measures that can be computed and reported. For example, facility-level turnover rates and vacancy rates would be skewed by very large or small values in a single health department. In order to maintain the confidentiality promised to each of the health departments, we present aggregate information in cases where identification might be a problem, and we present counts (instead of percentages) where identification is not possible based on the response.

The pilot survey offered respondents the opportunity to comment on the content of the questionnaire, and changes reflecting those comments will be made to the instrument before fielding of the statewide survey begins in July 2007. This report is intended as a preview of the types of analyses that could be performed – and used to shape health policy for the betterment of nursing and nurse employers – if an acceptable response rate is attained in the statewide study.

Results

Respondents were asked for the number of permanent full-time equivalent (FTE) employees they had on January 1, 2007 in each of four categories of nursing personnel. The five county health departments responding to this survey employed a total of 285 FTEs, the majority of which were Registered Nurses (RNs). On average, each health department employed around 30.0 RN FTEs and nearly 7 FTE Advanced Registered Nurse Practitioners (ARNPs). The vast majority of health department nursing personnel are permanent, scheduled employees. The respondents counted a total of 6 workers who were employed on a per diem basis or were agency or other temporary nurses.

Table 1. Public Health Department Staff Sizes

	Employed FTEs as Part of Permanent Staff		Employed Per Diem, Agency, or other Temporary Nurses	
	Total #	Average #	Total #	Average #
RNs	150.0	30.0	3.0	0.6
ARNPs	34.0	6.8	1.0	0.2
LPNs	33.0	6.6	0.0	0.0
CNAs	68.0	13.6	2.0	0.4
Total Nursing Staff Reported	285		6.0	

Figure 2 is a graphic representation of the skill mix of permanent nursing personnel within public health departments. In contrast to the long term care and home health industries, in public health departments the vast majority of personnel (76%) are licensed nurses. About 52% were RNs, 12% were ARNPs, and 12% were Licensed Practical Nurses (LPNs).

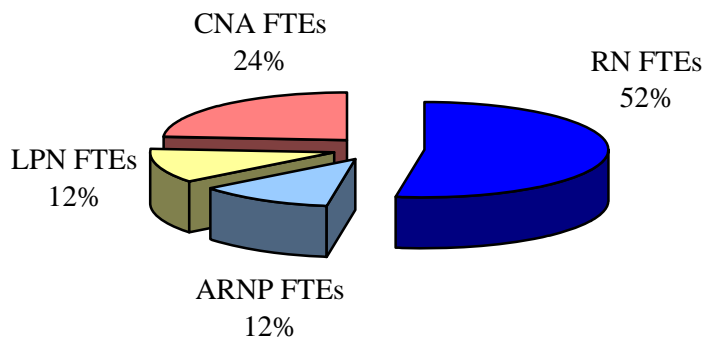


Figure 1. Skill Mix of Permanent Staff in Public Health Departments

The five public health departments reported a total of 29 vacant FTEs as of January 1, 2007. The bulk of these vacancies were for RN positions. Only one ARNP position and 3 Certified Nursing Assistant (CNA) positions (often titled “health care support technicians” in health departments) were open across the departments. The position vacancy rates reported in Table 2 combine information from all five health departments and are expressed as the percentage of *all* positions

in the five counties that are vacant. Still, position vacancy rates, when computed using a small number of facilities, can be misleading. When proportions are computed from very small numbers (as is the case with LPNs and ARNPs), a single additional vacancy can increase vacancy rates significantly. Even considering this limitation, the vacancy rates reported for ARNPs and CNAs are relatively small. The 10 percent vacancy rate reported for RNs indicates a bit more staffing instability, and it suggests that public health departments may be struggling to recruit RNs in a competitive labor market characterized by a nursing shortage.

Vacancy rates reflect difficulty in attaining desired staffing levels given the number of budgeted positions. However, they may not reflect the number of nurses that are needed to provide quality patient care. We asked health departments whether the number of budgeted positions they had was sufficient for the provision of quality care. As Table 2 shows, 2 of 5 health departments reported unmet need for additional RNs, ARNPs, and LPNs. Only 1 health department felt that the number of budgeted positions for CNAs was insufficient.

Table 2. Current Staffing Needs of Public Health Departments

	Total # of Vacant FTEs	Position Vacancy Rate*	# Reporting Unmet Need (of 5 total)
RNs	17.0	10.0%	2
ARNPs	1.0	5.9%	2
LPNs	8.0	20.5%	2
CNAs	3.0	4.2%	1
Total Vacancies	29		

*Computed as (Total Vacant Positions / Total Budgeted Positions)*100

We also asked health departments how many positions they expected to budget in 2008 and 2009. From this information, we computed the number of additional positions that will be added over the next two years for each of the nursing personnel types. Only three of the five health departments felt comfortable estimating the number of positions they would budget two years into the future. The total number of positions to be added by these three departments was 8 RN FTEs and 1 ARNP FTE. The health departments expected to lose about 2 LPN FTEs. Thus, significant growth is not expected in the three health departments providing this information.

Table 3. Separations and Turnover Rates in 2006

	Separations During 2006	# Reporting Increased Turnover Since 2005 (out of three*)
RNs	23	1
ARNPs	2	0
LPNs	5	1
CNAs	7	1

*Two public health departments did not evaluate the change in turnover.

We also asked respondents for the number of employees leaving their health departments (separations, or turnovers) during 2006. In keeping with the larger RN staff sizes in health departments, the largest number of separations (23) occurred for RNs. Because of the small sample size for this pilot study, we do not report facility-level turnover rates. However, we did

ask respondents whether and how their turnover rates had changed since 2005. Three health departments responded to this item, and only one of the three reported that turnover had increased for RNs, LPNs, and CNAs. None thought that ARNP turnover had increased.

Vacancies and turnover can lead health care providers to increase their use of overtime or contract/agency staffing to meet work demands. However, public health departments face unique constraints in their ability to pay for contract/agency or increased pay for overtime hours due to their government funding structure. Thus it was not surprising that all five health departments reported spending none of their nursing budgets on contract/agency staff (the few employees that are not counted within budgeted positions may work on a per diem basis for the health department). None of the five health departments reported spending more than 2 percent of their nursing budgets on overtime pay, and the average percentage spent was 0.75.

Respondents were presented with a series of items asking about difficulty in recruiting nurses for specialized roles and the length of time it took to fill open positions in those specialties. Due to the small sample size – and the fact that many of positions were not used by all health departments or had not been hired during 2006 – we do not report average fill times for this pilot project. Statewide results from the July survey, if an acceptable response rate is achieved, will allow such an analysis. For the purposes of this pilot project report, we will note that the most difficult to fill position appears to have been *school nurses*. All five health departments reported difficulty recruiting for this role, and it typically took several months to fill positions.

Finally, we asked respondents what consequences, if any, they had experienced in the past year as a result of an inadequate nurse supply. The question was asked in an open-ended format so that facility administrators could state in their own words what problems they have had. *All five health departments reported adverse consequences*. They cited:

- increased turnover
- heavier workload for existing personnel
- low morale / high stress among staff members
- decrease in revenue

Conclusions

Even with the small number of health departments included in this pilot project, results suggest that public health departments are feeling the effects of an inadequate nurse supply. However, the uniqueness of health departments in relation to the predominantly private home health and long term care industries is important to emphasize. The effects of a labor shortage in public health may not be evident simply by examining traditional staffing measures like vacancy rates, position fill times, and turnover rates. Personnel budgets for health departments, like many other government agencies, are not as flexible as the budgets of many private facilities. As a result, the number of vacant and budgeted positions they have may not accurately reflect their need for staff. Additionally, they may face more complex and lengthy hiring processes that cause vacancies to remain open for longer periods of time.

As the shortage intensifies, it will be important to monitor trends in public health. Our state's public health departments are the first line of local defense against communicable disease, and their clinics serve residents who may not otherwise receive care. For these reasons, the FCN is committed to including public health departments in the statewide nurse employer survey to be fielded in July 2007.

The high response rate (100%, or 5 of 5) indicates that our methodology, which includes gaining the support of public health officials and publicizing the effort through them, was successful. However, the pilot study results suggest that items tailored to the unique situation of public health departments should be considered for inclusion. All five health departments reported serious adverse consequences of an inadequate nurse supply, yet traditional staffing measures did not describe the root of the problems. The FCN will work to define additional ways to measure the shortage within public health, and we anticipate that future efforts (with larger sample sizes) will enhance our understanding of this important nurse employer group.



Florida Center for Nursing – Central Florida Survey of Public Health Departments

The Florida Center for Nursing is working to address the nursing shortage in our state, and we need your help in order to effectively plan for the future. We are asking administrators in Central Florida public health departments to complete this brief survey describing your current and future need for nursing personnel. Your responses are completely confidential. We will combine responses from all health departments in the area and report aggregate findings only. We invite you to view our results, which will be available on our website at <http://www.FLCenterForNursing.org>.

1. This item series will help us understand your facility’s current and future need for nursing personnel. We know that facilities use different budgeting periods, but in order to standardize across facilities we need information by **calendar years**. If your records do not track the proportion of a full-time equivalent (FTE) position each employee fills, use 1.0 for full-time employees and 0.5 for part-time employees.

Please enter “0” if appropriate.	Total # of budgeted FTEs as of January 1, 2007*	Total # of employed FTEs as of January 1, 2007*	Total # of vacant FTEs being actively recruited as of January 1, 2007*	Total # budgeted FTEs expected for calendar year 2008 ⁺	Total # budgeted FTEs expected for calendar year 2009 ⁺
a. Registered Nurses (excluding ARNPs)					
b. Advanced Registered Nurse Practitioners					
c. Licensed Practical Nurses					
d. CNAs/Health Care Support Technicians†					

†Please include all personnel, regardless of title, who function as nursing aides.

*Do not include per diem staff or other temporary personnel used to supplement permanent full or part-time staff.

⁺A rough estimate would be helpful if exact numbers are not known.

2. How many per diem, agency, or other temporary nurses did your facility employ **as of January 1, 2007**? Include all nurses not counted as part of the facility’s budgeted or employed FTEs in #1. Enter “0” if appropriate.

- a. RNs _____
- b. ARNPs _____
- c. LPNs _____
- d. CNAs/HCSTs _____

3. In your opinion, is the number of FTEs your facility **needs** to provide quality patient care greater than, equal to, or less than the number of FTEs currently budgeted for each type? [Remember, your responses are confidential.]

- a. RNs Greater Equal Less
- b. ARNPs Greater Equal Less
- c. LPNs Greater Equal Less
- d. CNAs/HCSTs Greater Equal Less

4. Approximately what percent of your **2006** calendar year’s nursing budget was spent on:

- a. Outside staffing agencies (both long and short term) _____ %
- b. Overtime for all nursing personnel _____ %

5. Do you expect these expenditures to be higher, about the same, or lower for calendar year 2007?

- a. Higher About the same Lower
- b. Higher About the same Lower

6. What consequences did your facility experience in **2006** as a result of an inadequate supply of nursing personnel? Indicate “none” if appropriate.

(survey continues on back)

7. This item series measures turnover* during calendar year 2006. When reporting the number of persons who left, please include both voluntary and involuntary leavers. Do not count those who moved from one position to another within your facility, or persons hired but never reporting for work. Include only **permanent employees**, and count both full and part-time employees. Please enter "0" if appropriate.

	A. Total # of persons who left during 2006	B. Total # of persons employed on January 1, 2006	C. Total # of persons employed on December 31, 2006	How have turnover rates changed since 2005?			
				Increased	Stayed the same	Decreased	Does not apply
a. RNs				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. ARNPs				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. LPNs				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. CNAs/HCSTs				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Your turnover rate will be computed as $[A \div ((B + C) / 2)] * 100$. You do not need to perform the calculation yourself.

8. Please report your experience in 2006 with recruiting and hiring these types of nursing employees:

	Did Not Employ in 2006	Did Not Hire in 2006 <i>skip A and B go to C</i>	A Recruitment Difficulty					B Average number of weeks it took to fill these positions in 2006	C Over the next 2 years, will your organization need fewer, more or about the same number of this type of nursing personnel? <i>Please check the appropriate boxes.</i>		
			Easy to Recruit				Very Difficult to Recruit		Fewer	Same	More
				1	2	3					
CNAs/Health Support Technicians	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational Health Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinic Staff Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality Control Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infection Control Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-service Educators	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nurse Supervisors	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nurse Administrators	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Epidemiology Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Care Coordinator / Case Management Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Outreach Nurses	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nurse Practitioners and Midwives	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for helping us better understand your nursing needs. Please return this survey today in the prepaid envelope provided.